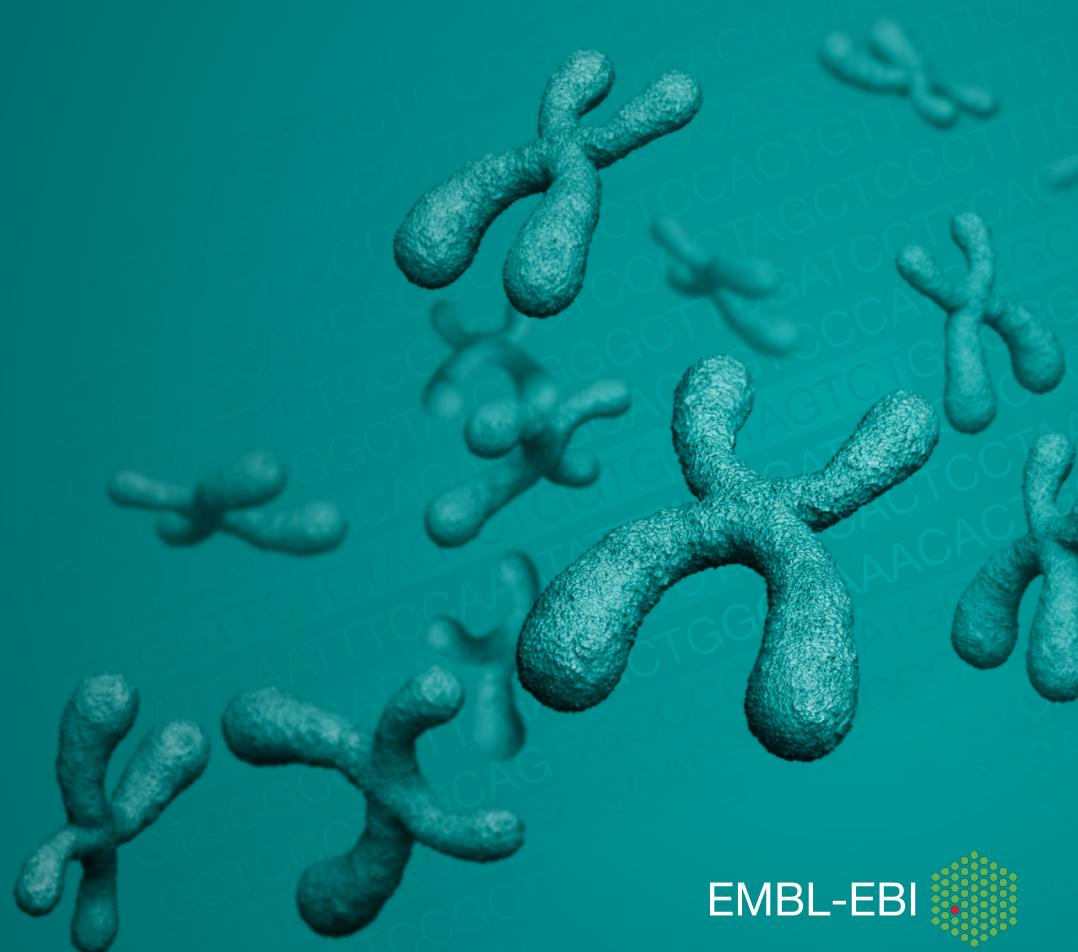


GA4GH – Consent codes

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Consent codes

- Groups datasets together in terms of consent agreements
 - Researchers can search by access requirements
 - Clarifies the access requirements
- Automate dataset application / access
- Consent requirements machine readable
 - Moran and Dylan will describe specific use cases

Consent Codes

Name	Abbreviation	Description
Primary Categories (I ^{IV})		
No restrictions	NRES	No restrictions on data use.
General research use and clinical care	GRU(CC)	For health/medical/biomedical purposes, including the study of population origins or ancestry.
Health/medical/biomedical research and clinical care	HMB(CC)	Use of the data is limited to health/medical/biomedical purposes; does not include the study of population origins or ancestry.
Disease-specific research and clinical care	DS-[XX](CC)	Use of the data must be related to [disease].
Population origins/ancestry research	POA	Use of the data is limited to the study of population origins or ancestry.
Secondary Categories (II ^{IV}) (can be one or more extra conditions, in addition to I ^{IV} category)		
Other research-specific restrictions	RS-[XX]	Use of the data is limited to studies of [research type] (e.g., pediatric research).
Research use only	RUO	Use of data is limited to research purposes (e.g., does not include its use in clinical care).
No “general methods” research	NMDS	Use of the data includes methods development research (e.g., development of software or algorithms) ONLY within the bounds of other data use limitations.
Genetic studies only	GSO	Use of the data is limited to genetic studies only (i.e., no “phenotype-only” research).
Requirements		
Not-for-profit use only	NPU	Use of the data is limited to not-for-profit organizations.
Publication required	PUB	Requestor agrees to make results of studies using the data available to the larger scientific community.
Collaboration required	COL-[XX]	Requestor must agree to collaboration with the primary study investigator(s).
Ethics approval required	IRB	Requestor must provide documentation of local IRB/REC approval.
Geographical restrictions	GS-[XX]	Use of the data is limited to within [geographic region].
Publication moratorium/embargo	MOR-[XX]	Requestor agrees not to publish results of studies until [date].
Time limits on use	TS-[XX]	Use of data is approved for [x months].
User-specific restrictions	US	Use of data is limited to use by approved users.
Project-specific restrictions	PS	Use of data is limited to use within an approved project.
Institution-specific restrictions	IS	Use of data is limited to use within an approved institution.

doi:10.1371/journal.pgen.1005772.t001

Dyke et al. 2016

History

- MTT (Melanie) and EGA (Dylan/Giselle) worked on an ontology formalizing the Dyke et al. consent codes.
- Feedback from EGA DAC positive
 - Considering using one data agreement for all datasets
 - Could be added into electronic data requests
- In Vancouver, Anthony Philippakis presented on the Data Use Ontology the Broad was developing
- Both efforts were merged in January 2017



Common GitHub repository

- Includes consistency tests
- Uses GH tag for each release
- Unified issue tracker
- Reserved ID range for new terms from Broad

<https://github.com/EBISPORT/DUO>

Data Use ontology - versioning

- Latest release is *always* at
<http://purl.obolibrary.org/obo/duo.owl>
- Dated versions for previous releases:
<http://purl.obolibrary.org/obo/duo/releases/2017-01-31/duo.owl>

Data Use Ontology - availability

- DUO has been registered with the OBO Foundry,
<http://obofoundry.org>
- Terms can be dereferenced via Ontobee,
http://purl.obolibrary.org/obo/DUO_0000001

Ontobee

Home | Introduction | Statistics | SPARQL | Ontobee | Tutorial | FAQs | References | Links | Contact | Acknowledge | News

The Data Use Ontology

Keywords: Search terms

Class: consent code

Term IRI: http://purl.obolibrary.org/obo/DUO_0000001

Definition: A data item that is used to indicate consent permissions for datasets and/or materials, and relates to the purposes for which datasets and/or material might be removed, stored or used.

Annotations

- id: DUO:0000001

Class Hierarchy

Thing

- + entity
 - + continuant
 - + generically dependent continuant
 - + information content entity
 - + data item
 - + data use requirements
 - + data set
 - + data about an ontology part
 - + measurement datum
 - setting datum
 - + cartesian spatial coordinate datum
 - consent code
 - + consent code primary category
 - + consent code secondary category

① view-source:www.ontobee.org/ontology/DUO?iri=http://purl.obolibrary.org/obo/DUO_0000001

```
1 <?xml version="1.0"?>
2 <?xmlstylesheet type="text/xsl" href="http://www.ontobee.org/ontology/view/DUO?iri=http://purl.obolibrary.org/obo/DUO_0000001"?>
3 <rdf:RDF xmlns="http://www.w3.org/2002/07/owl#"
4   xmlns:base="http://www.w3.org/2002/07/owl"
5   xmlns:dc="http://purl.org/dc/elements/1.1/"
6   xmlns:obo="http://www.geneontology.org/formats/oboInOwl#"
7   xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
8   xmlns:foaf="http://xmlns.com/foaf/0.1/"
9   xmlns:owl="http://www.w3.org/2002/07/owl#"
10  xmlns:xsd="http://www.w3.org/2001/XMLSchema#"
11  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
12  xmlns:n0pred="http://purl.obolibrary.org/obo/">
13
14
15
```

Data Use Ontology - browsing

- DUO can be browsed online via the Ontology Lookup Service

http://www.ebi.ac.uk/ols/ontologies/duo/terms?iri=http%3A%2F%2Fpurl.obolibrary.org%2Fobo%2FDUO_0000001



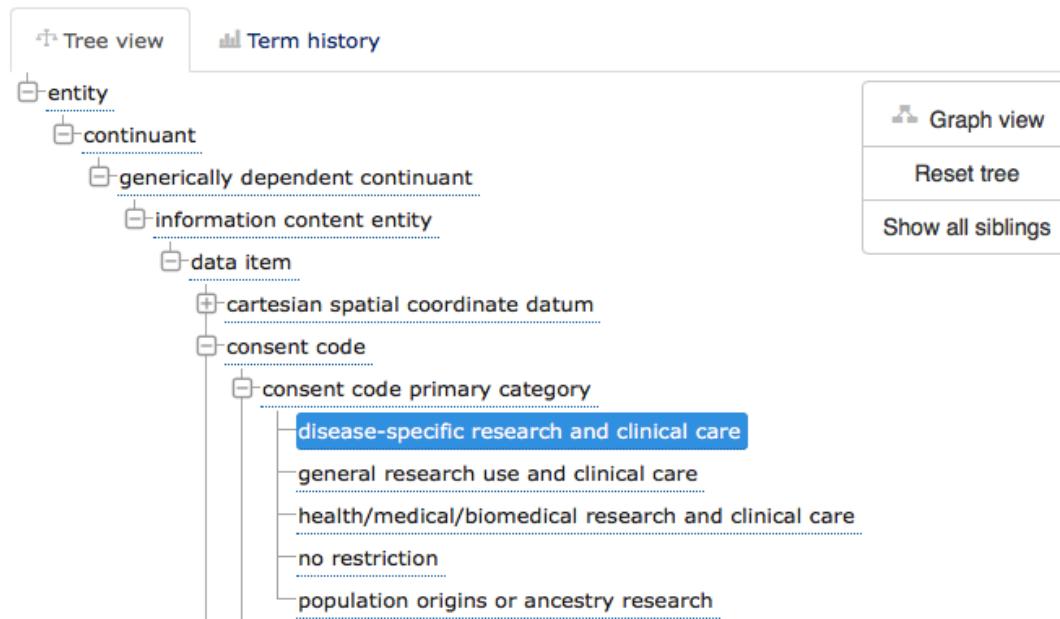
Graph view
Reset tree
Show all siblings

<http://www.ebi.ac.uk/ols/>

Logical restrictions

http://purl.obolibrary.org/obo/DUO_0000007 

This primary category consent code indicates that use is allowed provided it is related to the specified disease.



Term info

id
DUO:0000007

Term relations

Subclass of:

- consent code primary category
- *is restricted to some disease*



Global Alliance for Genomics & Health

DWG & SWG Newsletter February 2017

The [Metadata Task Team](#), in collaboration with the REWG and SWG, has been working to standardise consent codes and data use restrictions, based on the paper published by [Dyke et al.](#) in 2016. The resulting Data Use Ontology (DUO) can be browsed [online](#) using the Ontology Lookup Service. It has been registered with the [OBO Foundry](#), a consortium of over 100 developers committed to ontology best practices. Collaboration is invited via our [Github repository](#). Teams from EMBL-EBI, [EGA](#), and the [Broad Institute](#) are developing applications which will reference this ontology.



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